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| David E. Bruhn | | EXAMINER | | |
| DORSEY & WHITNEY LLP | | BOGART, MICHAEL G | | |
| Intellectual Property Department | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/628,588

Applicant(s)

DROGUE ET AL.

Examiner

MICHAEL G. BOGART

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 43-45 is/are allowed.
- 6) ☒ Claim(s) 31-42 is/are rejected.
- 7) ☒ Claim(s) 46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14 August 2008 has been entered.

Claim Rejections – 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 31 and 40-42 are rejected under 35 U.S.C. § 102(e) as being anticipated by Byrd *et al.* (US 6,203,590 B1; hereinafter: “Byrd”).

2. Regarding claim 31, Byrd discloses a vacuum system (10) comprising:

a vacuum source (16, 50);

a connector (12, 14) comprising an inlet (126), an outlet (70) operably coupled directly with the vacuum source (16, 50), wherein the vacuum source (16, 50) is positioned downstream from the outlet (70), a separation chamber (12) in communication with the inlet (126), an air

pathway (134) from the separation chamber (12) and to the outlet (70), and a fluid pathway, separate from the air pathway (134), and from the separation chamber (12) to the outlet; and

an end effector (124) in communication with the inlet (col. 3, lines 39-50)(see annotated figures 1 & 4, *infra*). It is noted that the pre-filter housing (12) will trap fluids at the bottom portion of the housing below air pathway (134) due to gravity flow, although, the fluid pathway at the bottom of the housing will still be in communication with outlet (70).

Regarding claim 39, Byrd discloses a collection chamber in communication with the separation chamber (12)(col. 9, lines 41-61).

Regarding claim 40, Byrd discloses a vacuum regulator (64, 82)(col. 7, lines 13-39).

Regarding claim 41, Byrd discloses a baffle (130), see fig. 4.

Regarding claim 42, Byrd discloses a filter (130), see fig. 4.

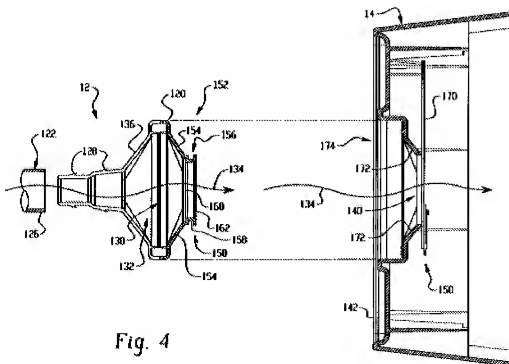
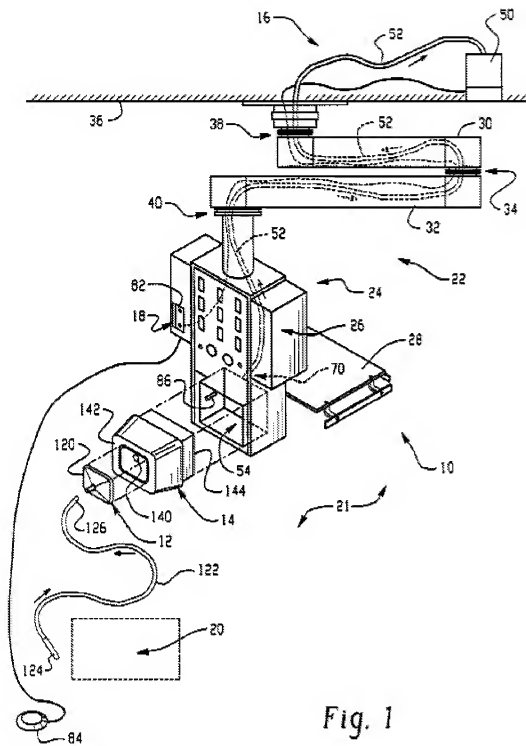


Fig. 4



Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. § 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

4. Claim 37 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Byrd.

Byrd does not disclose an additional separate input.

Mere duplication of parts is not sufficient to patentably distinguish the claimed invention over the prior art. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). One of ordinary

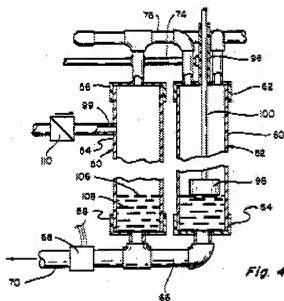
skill in the art would have recognized that multiple ports would allow for the use of multiple end effectuators.

Claim 32 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Terry (US 5,242,434 A).

Byrd discloses a collection device attached to the connector (12, 14) but does not disclose decontaminating solution (col. 9, lines 41-61).

Terry discloses a medical waste collection canister (50) containing disinfectant liquid (108)(col. 7, lines 33-45)(see fig. 4, *infra*). This aids in resisting infection of someone who handles the container.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to add the disinfectant solution of Terry to the collection container of Byrd in order to resist infection of someone who handles the container.



5. Claims 33 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Byrd, and further in view of Goosen (US 5,019,060).

Byrd does not expressly teach a measuring device.

Regarding claim 38, Goosen teaches a flow volumetric flow indicator (26)(figure 2, *infra*).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to add the flow indicator of Goosen to the evacuation apparatus of Byrd in order to provide a means of monitoring the flow rate of the system.

Where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is unpatentable under 35 U.S.C. § 103(a). *Ex Parte Smith*, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007)(citing *KSR v. Teleflex*, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)). Accordingly, Applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results; absent persuasive evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. § 103(a). *Ex Parte Smith*, 83 USPQ.2d at 1518-19 (BPAI, 2007)(citing *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396). Accordingly, since the applicant[s] have submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. § 103(a) because it

is no more than the predictable use of prior art elements according to their established functions resulting in the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.

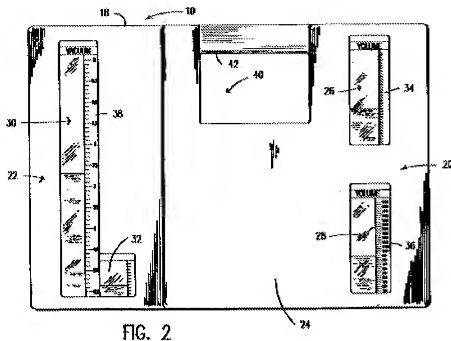


FIG. 2

Regarding claim 33, Byrd in view of Goosen do not expressly disclose a flow meter.

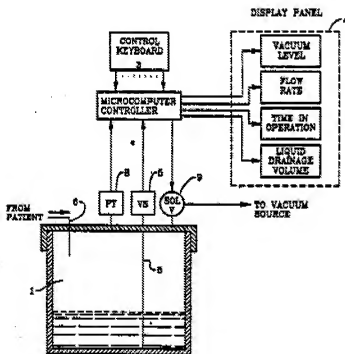
Merely automating a prior art process is not sufficient to patentably distinguish a claimed invention if no unexpected result can be demonstrated. See *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) (Appellant argued that claims to a permanent mold casting apparatus for molding trunk pistons were allowable over the prior art because the claimed invention combined "old permanent-mold structures together with a timer and solenoid which automatically actuates the known pressure valve system to release the inner core after a predetermined time has elapsed." The court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not

sufficient to distinguish over the prior art.). MPEP § 2144.04. In the instant case, applicants have added electronic calculating means to a flow meter, which can automatically calculate flow rates, etc. This is simply an automation step over the manual calculations which may be performed by the combination of Byrd and Goosen.

6. Claims 34 and 35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Byrd and Goosen in view of Walker (US 5,195,995 A).

Byrd in view of Goosen do not expressly teach a key pad input device.

Walker teaches a keyboard (3) for controlling a medical suction apparatus (see figure 1, *infra*).



At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the keyboard of Walker to the evacuation apparatus of Byrd in view of Goosen in order

to provide a means of controlling the air pressure and vacuum applied to a patient. See *Ex Parte Smith*, supra.

7. Claim 36 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Byrd in view of Paul (US 5,264,026 A).

Byrd does not disclose a centrifugal separator.

Paul discloses a centrifugal separator (12). This aids in separating liquids from gases.

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the centrifugal separator of Paul to the evacuation apparatus of Byrd in order to provide an additional means of separating the components of an incoming plume. See *Ex Parte Smith*, supra.

Allowable Subject Matter

8. Claims 43-45 are allowed.

9. Claim 46 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The most relevant art of record, Byrd, does not disclose or fairly suggest the structure discussed in detail supra, further having decontamination fluid in a container that collapses as vacuum forces pull the decontamination fluid into the separation chamber.

Response to Arguments

10. Applicant's arguments with respect to claims 31-42 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL G. BOGART whose telephone number is (571)272-4933. The examiner can normally be reached on M-F, 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Bogart/
Examiner, Art Unit 3761

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Supervisory Patent Examiner, Art Unit 3761